

## ABSTRACT OF THE DISCLOSURE

In a system and method for determining the suitability of a copper pair line for xDSL service use, characteristic parameters of a copper pair line to be tested are measured. These characteristics include a wire gauge, length, and temperature of the copper pair line. In addition, characteristics such as the presence of short circuits,  
5 longitudinal balance, the presence of load coils, wideband noise and loop attenuation are tested for the copper pair line. A plant map of the copper pair line is then determined based on the measured and tested characteristics. Using the above characteristics and the plant map of the copper pair line, a transfer function representative of the plant map is determined which is then used to analyze and  
10 thereby qualify the copper pair line.

DISCLOSURE STATEMENT